

The Kennedy Chamber



A Life Support System For Underground Mines

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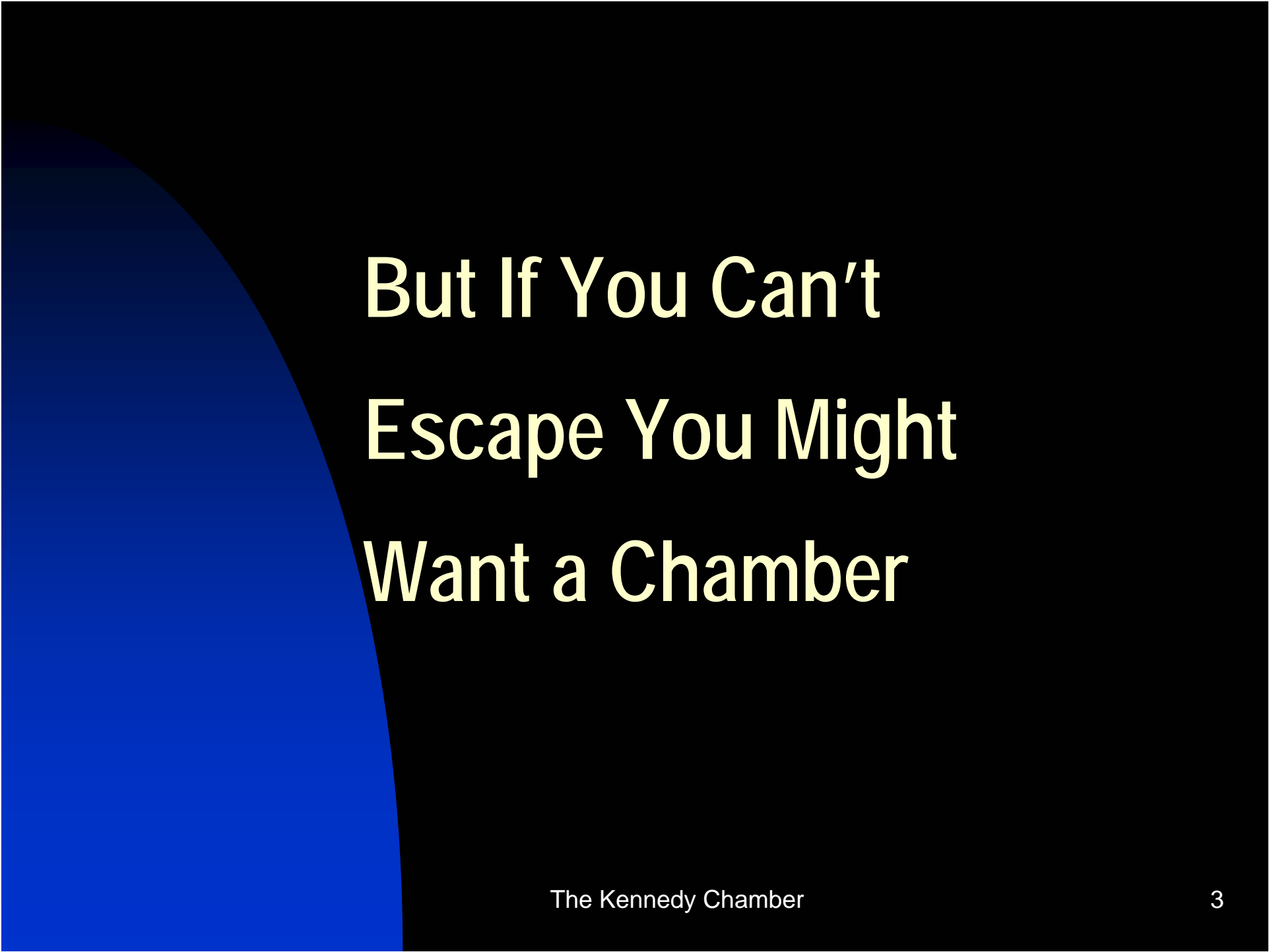
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The Kennedy Chamber

Escape The Mine!



- Chambers Are Simply Better Barricade Materials



But If You Can't
Escape You Might
Want a Chamber

Design Criteria

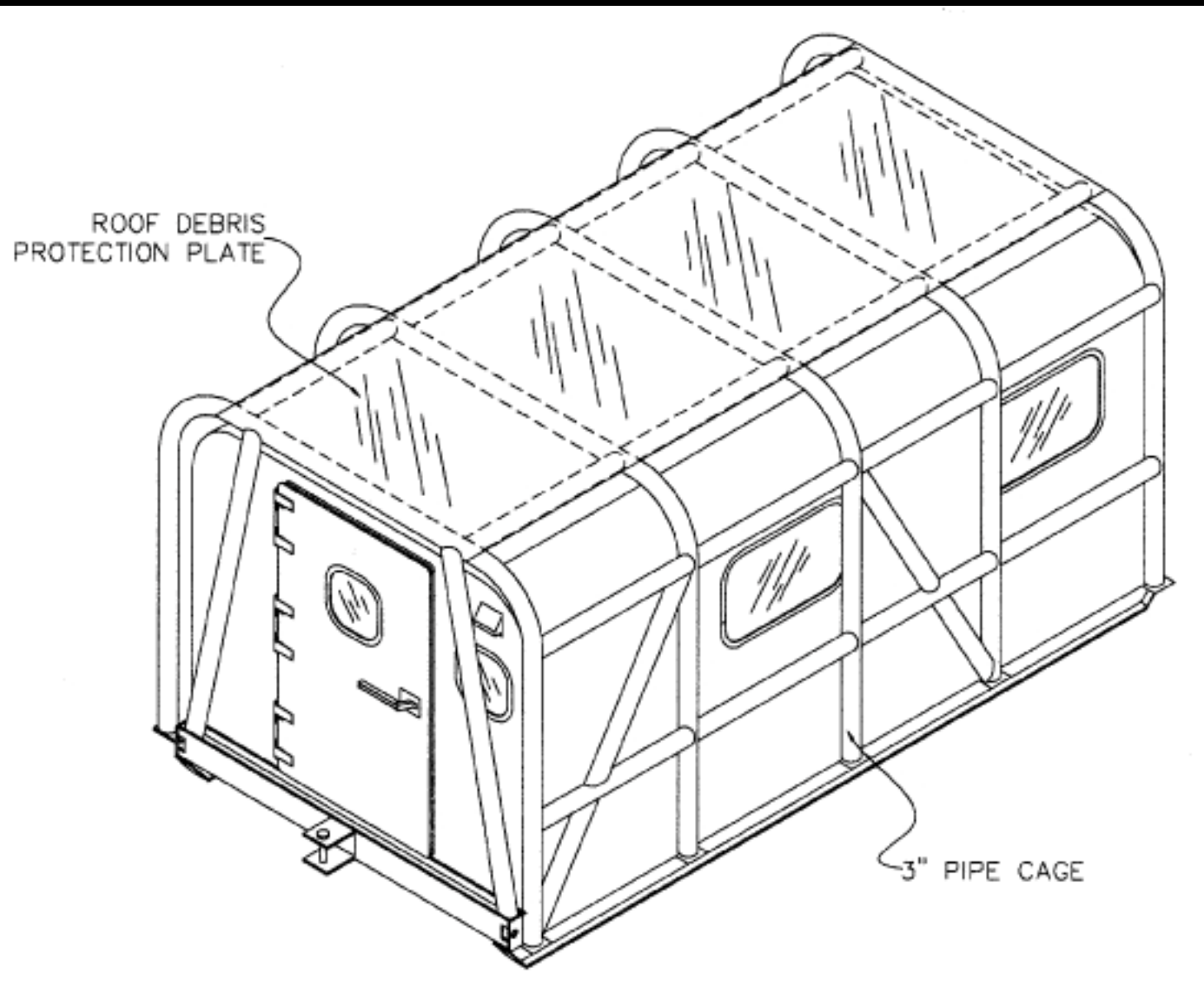
- 100 Hour Operation At Full Capacity
- Very Quick Initialization
- Purge Air To Quickly Ready Chamber (House Units)
- Onboard Oxygen Supply Without Chemicals, Heat Or Ignition Sources

Design Criteria (Con't)

- Oxygen Rate Adjustable According To Occupancy
- CO2 Scrubbing
- Positive Pressure Operation
- No Power Required
- 'Mine Tough' Unit
- 5 Year Commission Life

Mine Tough

- The Chamber Is Designed To Be Used In An Underground Mine
- The Skid Design Allows Repeated Movement With A Minimum Of Unit Height
- A Special 'Hardened' Version Is Available As An Option



The Kennedy Chamber

Life Support Capacity

- 100 Hours At Full Capacity
- 200 Hours At Half Capacity
- Capable Of Two Times Overload At Half Duration

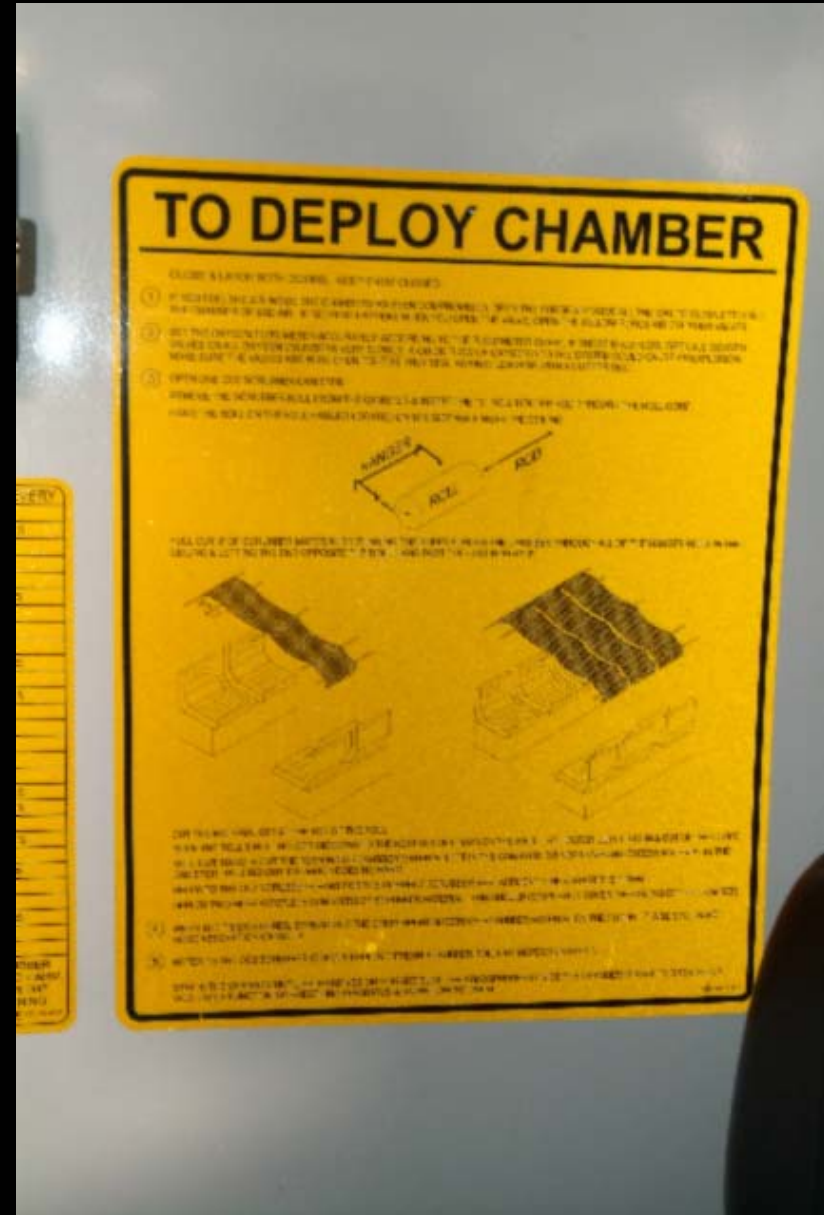
'Instant' Setup Time

- Most Of The Time All You Have To Do To Use The Chamber Is Enter It
- If It Is Contaminated, Purge Air Is Supplied To Blow Out The Chamber
- Oxygen Flow Is Started With The Turn Of A Knob
- CO2 Scrubbing Is Initialized In Minutes

Simple Operation

- No. 1 Purge Chamber (If Necessary)
- No. 2 Start Oxygen Flow
- No. 3 Deploy Scrubber Material

Deployment Instruction Placard



The Kennedy Chamber

No. 1 Open The Purge Air Valve



Purge Air Muffler

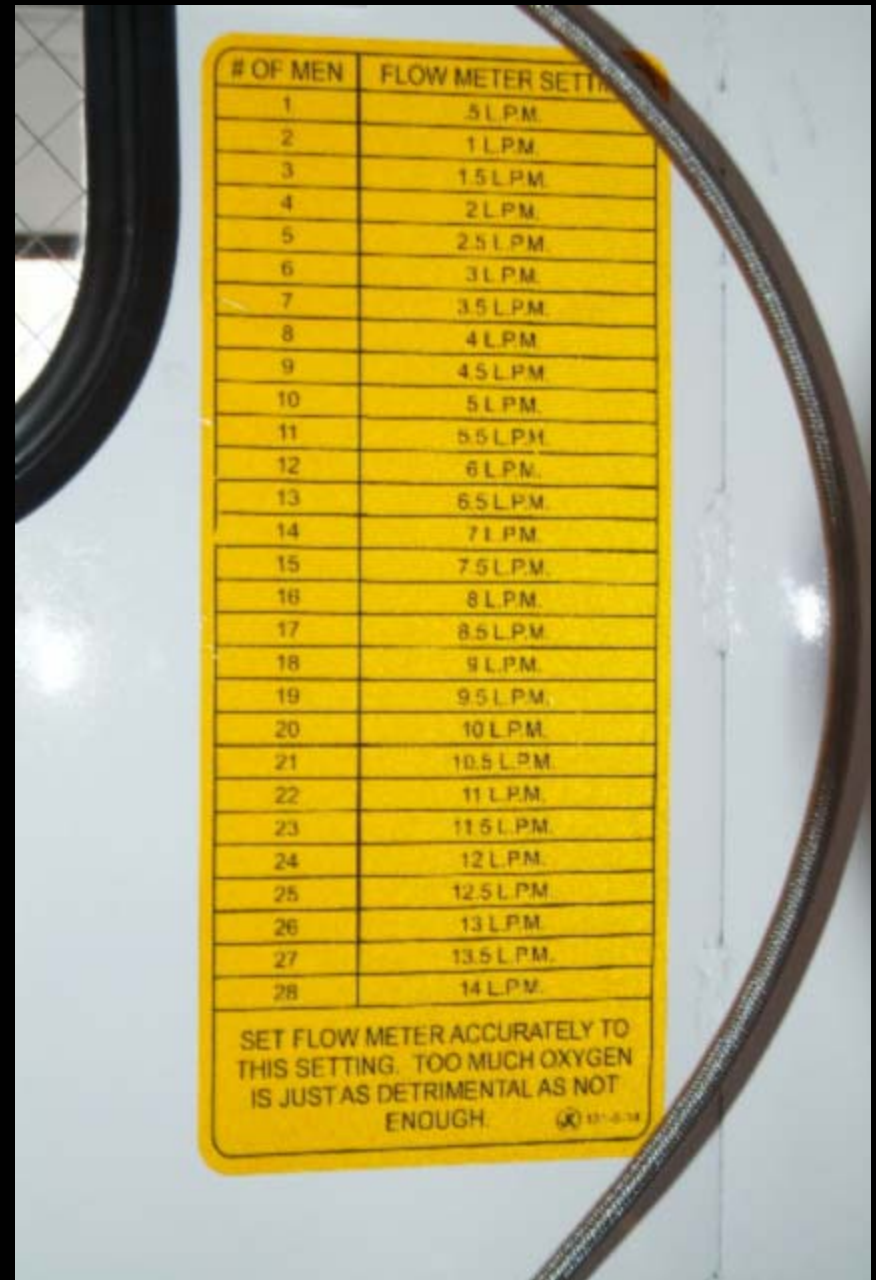


The Kennedy Chamber

No. 2 Start Oxygen Flow

- Oxygen Must Be Regulated According To The Number Of People In The Chamber
- Too Little Causes Hypoxia
- Excess Flow --
 - ◆ Wastes Chamber Time
 - ◆ Causes Oxygen Toxicity
 - ◆ Creates A Fire Hazard

Oxygen Placard



# OF MEN	FLOW METER SETTING
1	5 LPM
2	11 LPM
3	15 LPM
4	20 LPM
5	25 LPM
6	30 LPM
7	35 LPM
8	40 LPM
9	45 LPM
10	50 LPM
11	55 LPM
12	60 LPM
13	65 LPM
14	70 LPM
15	75 LPM
16	80 LPM
17	85 LPM
18	90 LPM
19	95 LPM
20	100 LPM
21	105 LPM
22	110 LPM
23	115 LPM
24	120 LPM
25	125 LPM
26	130 LPM
27	135 LPM
28	140 LPM

SET FLOW METER ACCURATELY TO THIS SETTING. TOO MUCH OXYGEN IS JUST AS DETRIMENTAL AS NOT ENOUGH.

Oxygen Flow Meter



The Kennedy Chamber

No. 3 Start CO2 Scrubbing

- CO2 Control Is By Lithium Sheet
- No Power Is Required
- Very Long Periods (Hours) Between Sheet Changes

Scrubbing Media Timer

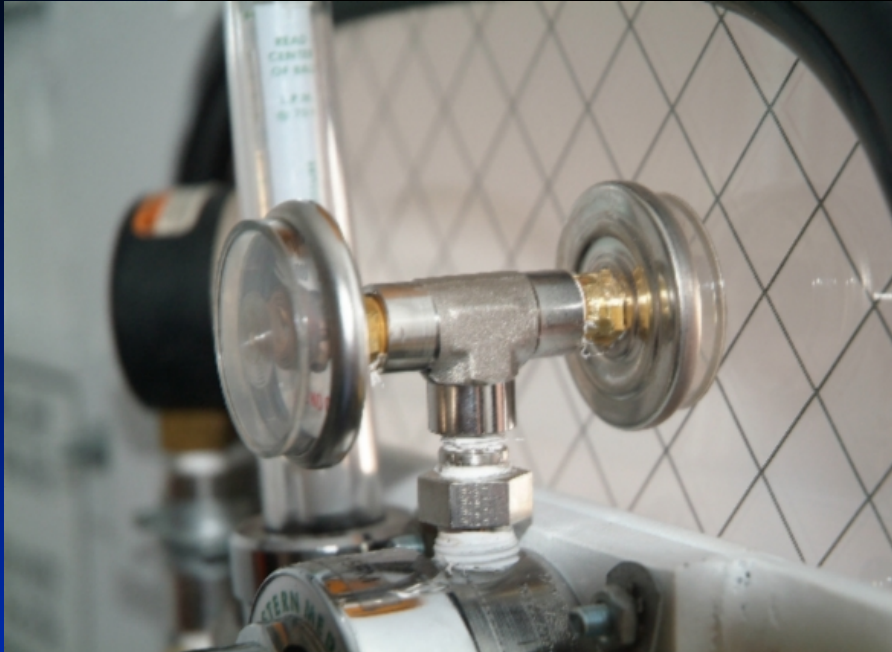
- Mechanical 24 Hour Timer With Bell



5 Year Commission Life

- Everything In The Chamber Is Designed For A 5 Year Life *WITHOUT* Maintenance
- Routine Inspection Only Requires –
 - ◆ Looking At The Outside For Damage
 - ◆ Checking The Air and Oxygen Gauges
 - ◆ Checking The Tamper Seal

Pressure Gauges



- Gauges Visible Without Entering Chamber
- Oxygen Gauge Visible From Both Directions

Recommissioning

- Factory Recommissioning Is Available
- At Their 5 Year Anniversary The Oxygen And Air Cylinders Must Be Removed And Hydrostatically Tested
- Provisions Replaced
- Damage Repaired

Three Unit Types --

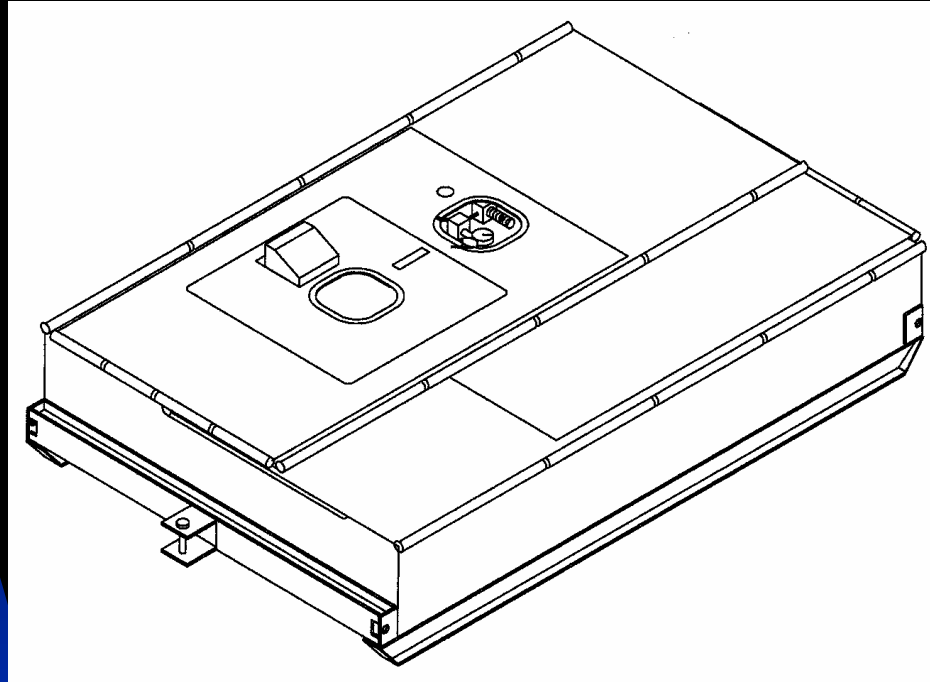
- House
- Folding House
- Skid

House



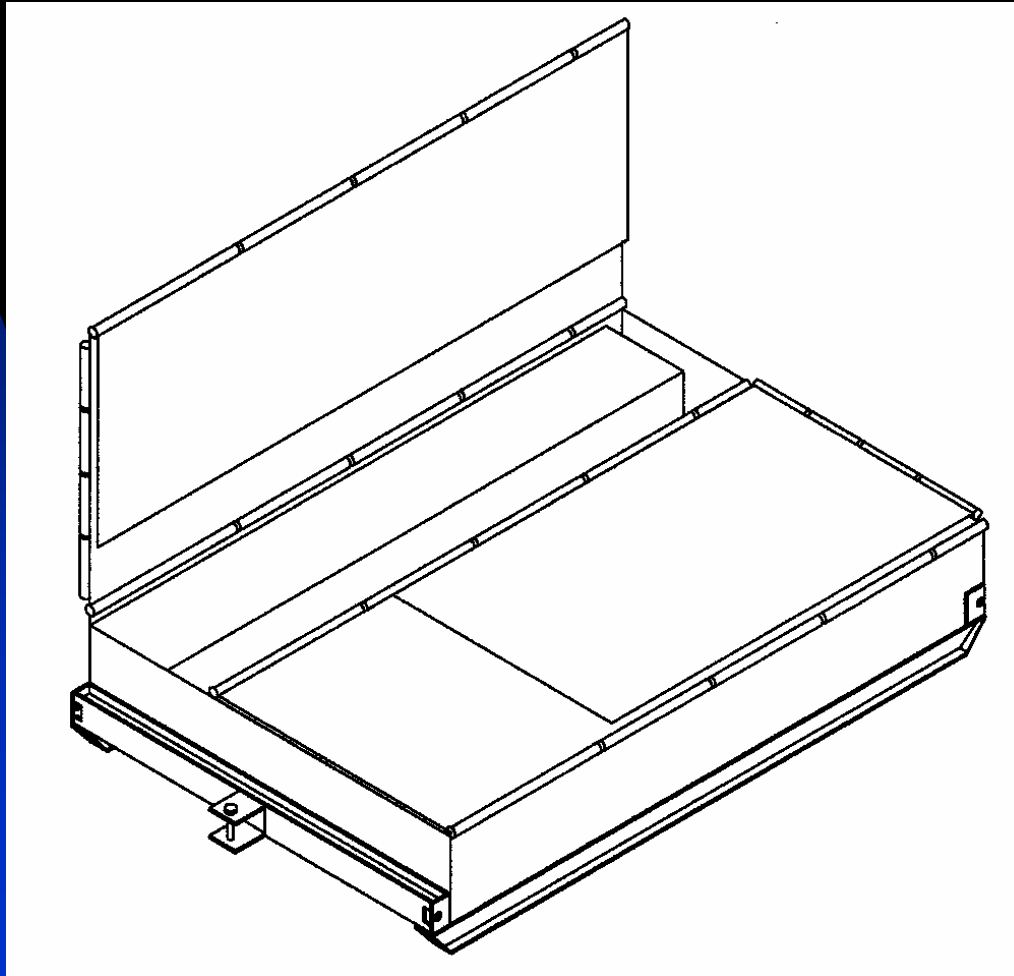
- Best Choice – Ready To Go – Very Cost Effective

Folding House Unit



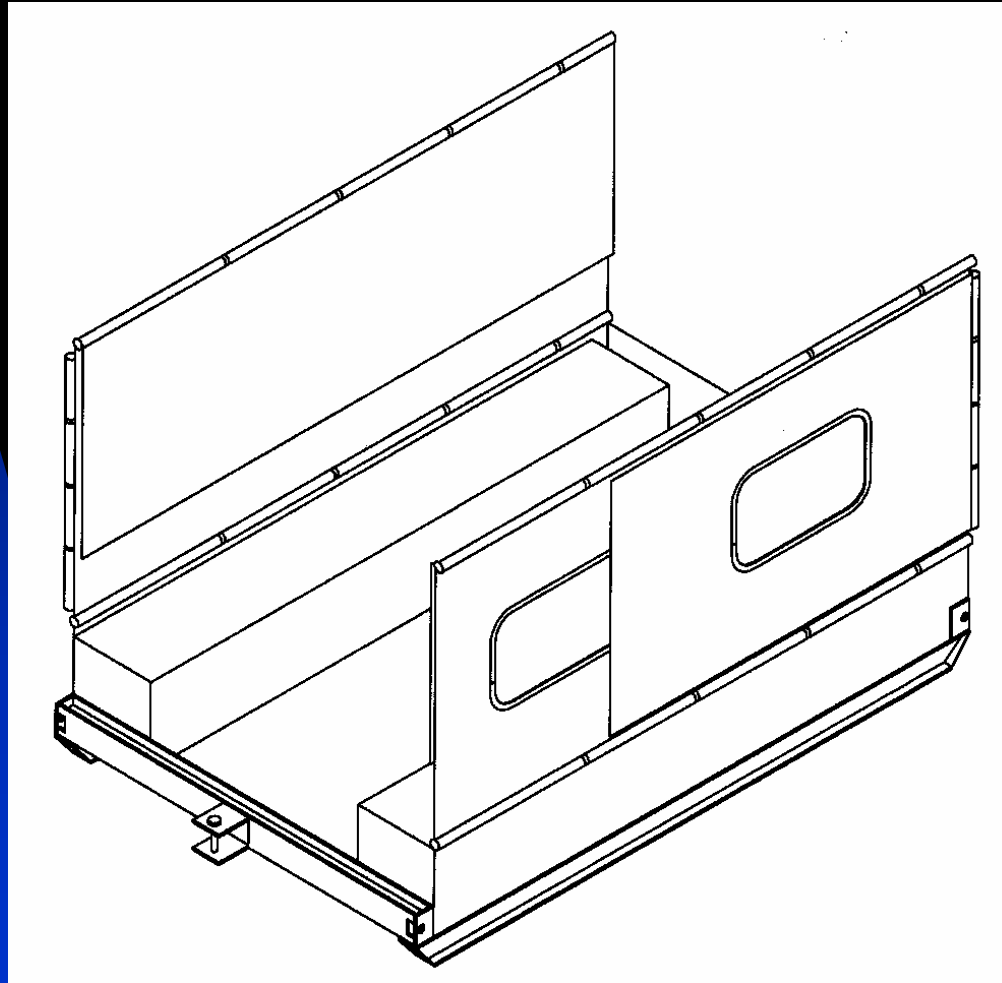
- Allows Transportation Under Low Top
- Deployment Takes No More Height Than A Completely Deployed Unit
- Contains Everything A House Unit The Same Capacity Has
- *Does Not Have An Airlock*

Step 1



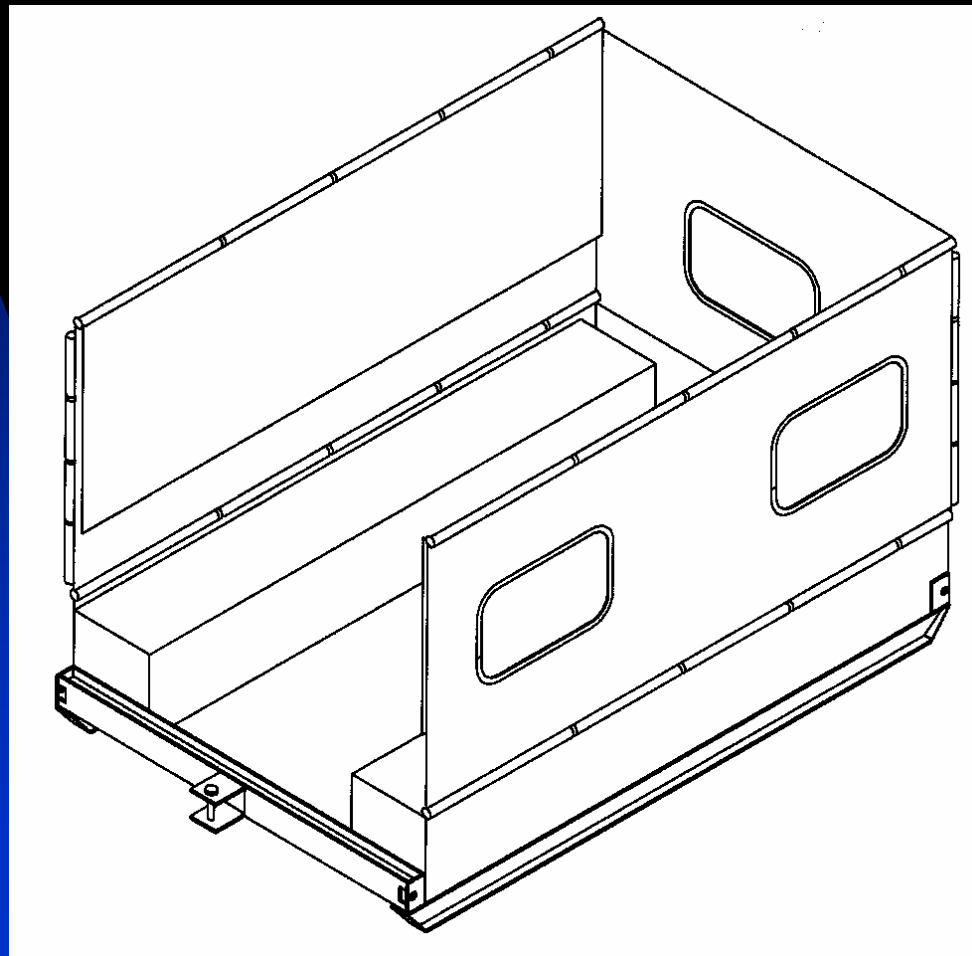
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Step 2



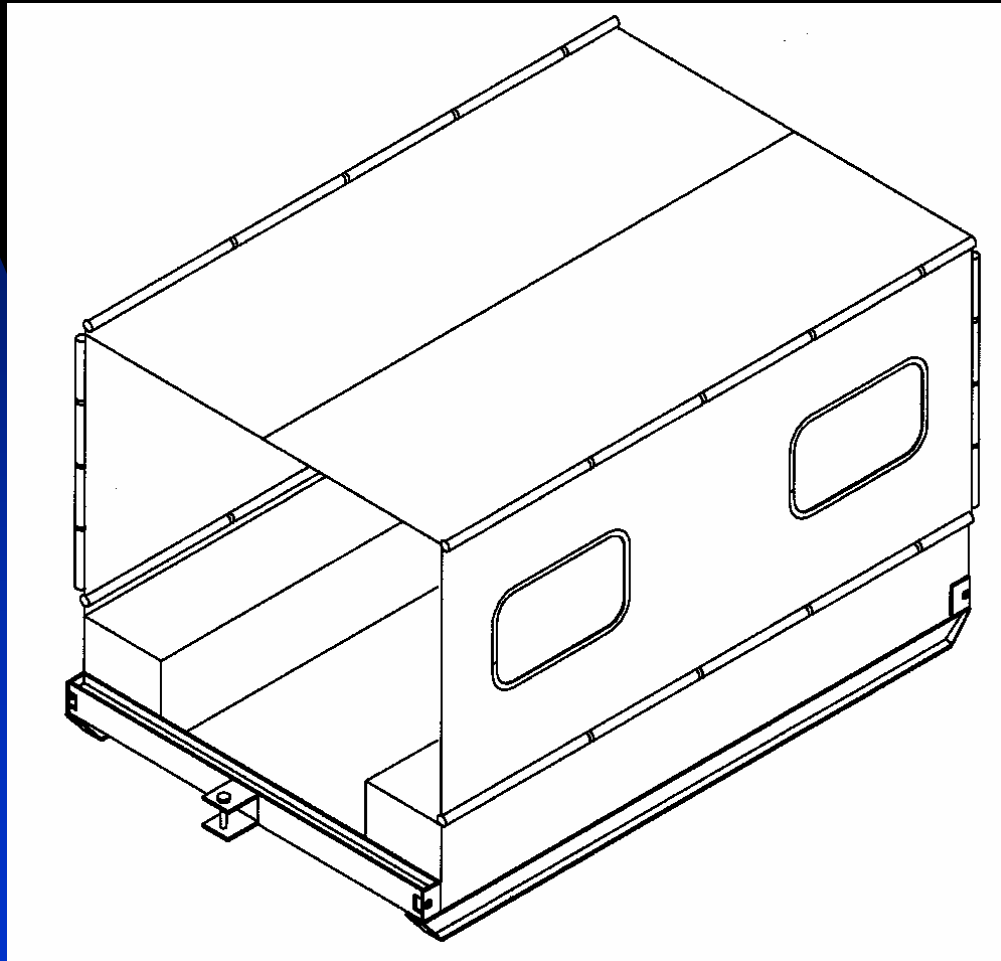
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Step 3



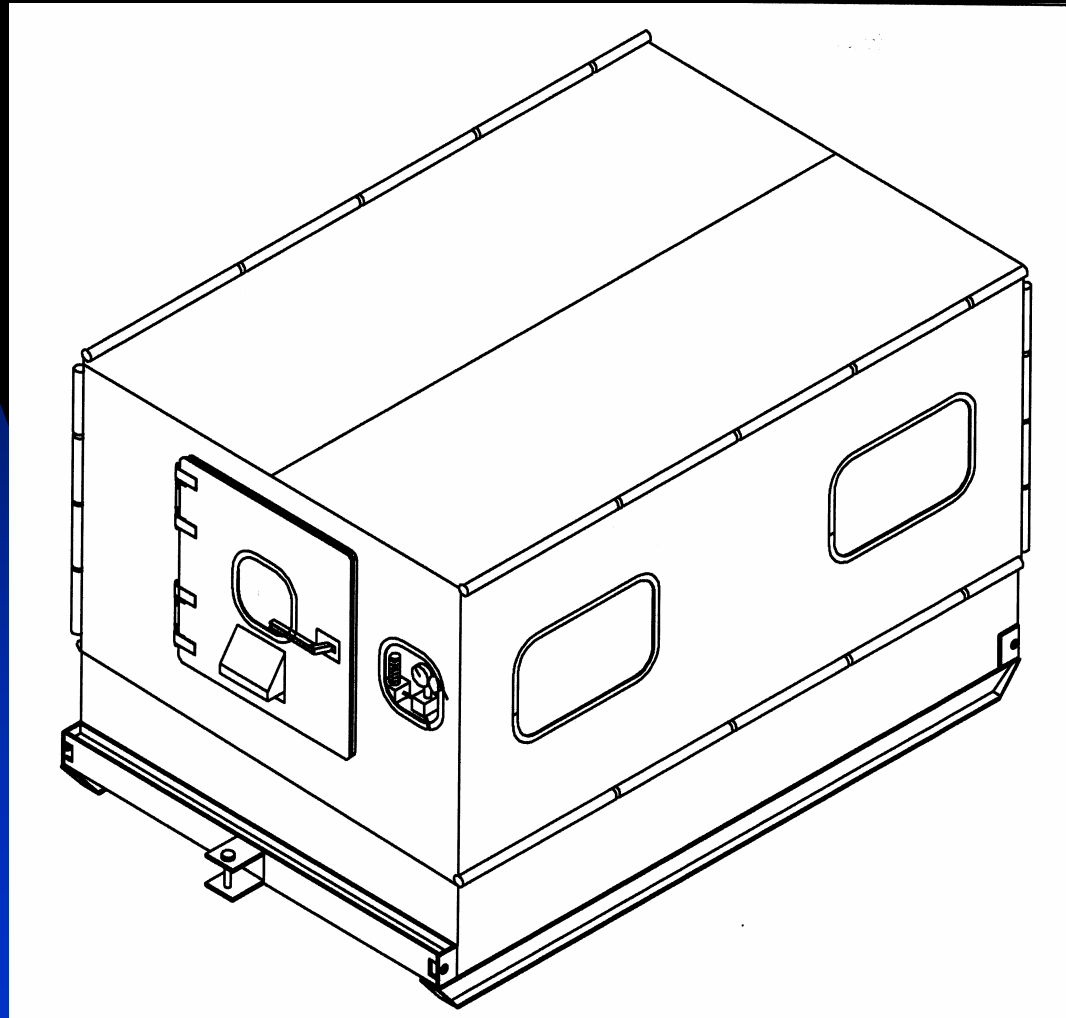
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Step 4



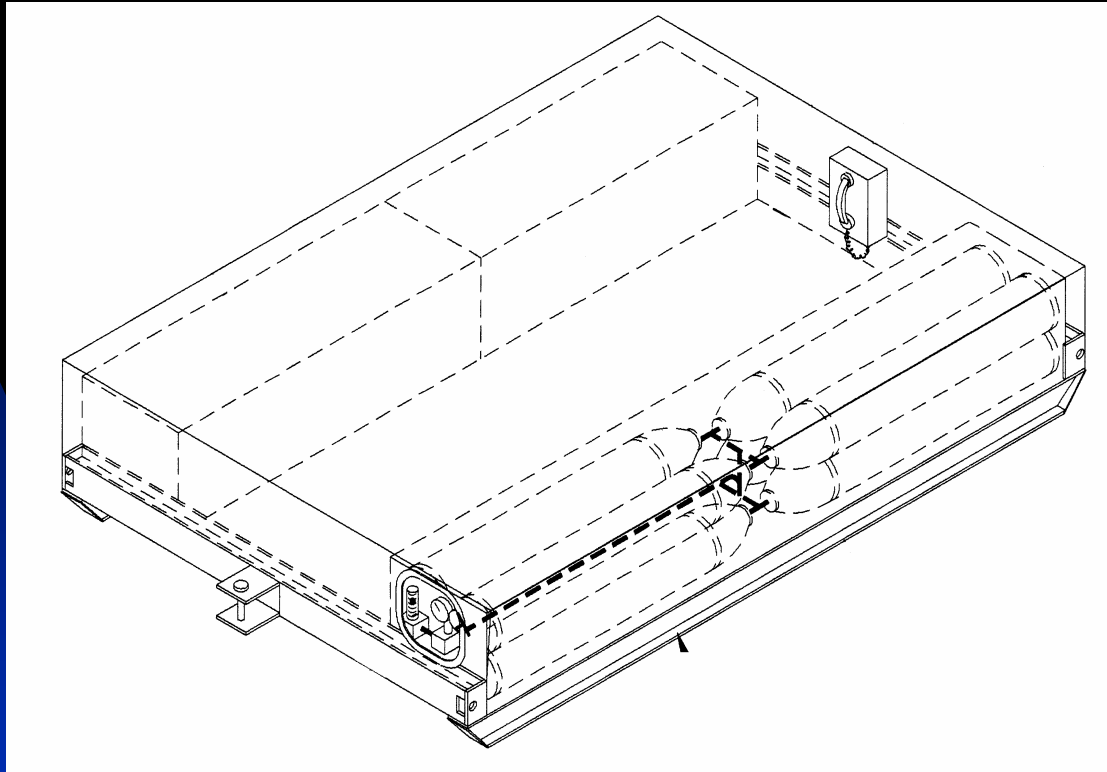
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House Unit Deployed



The Kennedy Chamber

Skid Unit



- Suitable For Very Low Conditions
- Can Carry Barricade Materials
- Contains Everything A House Unit The Same Capacity Has



Design Details

Heavy Cylinder Containment



- ½" Plate 'Armor'
- Special Longitudinal Restraint

Energy Absorbing Design



The Kennedy Chamber

Escape Windows



Permissible Telephone

- 'Thru Hull' Connectors



The Kennedy Chamber

Chemical Toilet



The Kennedy Chamber

Provisions

- Food
- Water
- Reading Material
- Books
- Pencils
- Games
- 300 Hour Permissible Flashlights

Light, Bright, Unobstructed Interior



The Kennedy Chamber

Gas Sampling Port



Positive Pressure Relief Valve



First Aid



- EMT Kit Plus –
 - ◆ Large and Small Air Splints
 - ◆ Backboard

Repair Materials



- Oversize SAR Acrylic Windows
- Duct Tape

Training



- DVD Training Materials
- Mobile Chamber